

Safe brake resistors in wire-wound technology



Safe brake
resistors

AWx300

Brake resistor AWx300

Short-circuit proof, „intrinsically safe“¹ resistor for use in inverters (brake transistors) in an aluminum case, IP54 protection class.



Rated power (W)
120 (300 with duty cycle ED = 35%, $\vartheta_A = 20^\circ\text{C}$)

Resistance (Ohm)
27, 47, 72, 100, 150, 200

Dimensions (mm)
Enclosure: 246 x 60 x 9.6
Wiring: length 480 ± 10
Ø AWG16 or 1.5 mm²
PTFE isolated,
UL Style 1659



Technical specifications
($\vartheta_A = 20^\circ\text{C}$, unless otherwise specified)

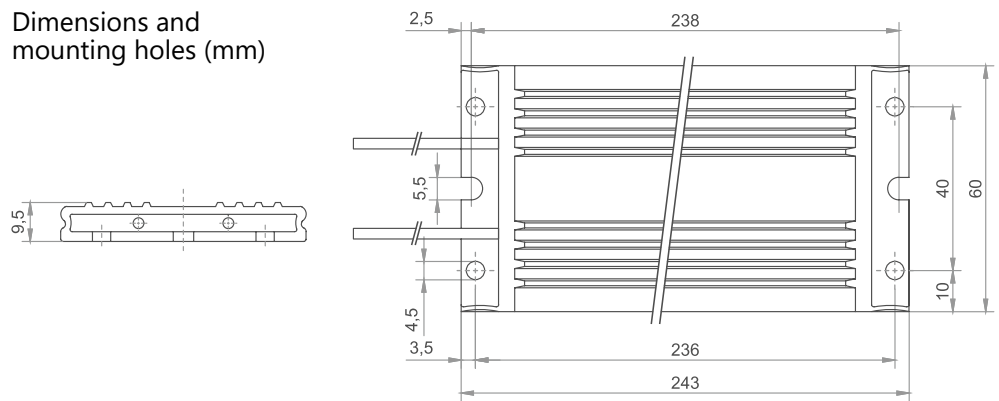
Parameter	Symbol	Value	Unit	Conditions
Tolerance (resistance)		± 10	%	Room temperature
Insulation resistance	R_{ISO}	≥ 100	MΩ	$U_{mess} = 1,000\text{ VDC}$
Inductance	L	≤ 30	μH	$f = 300\text{ kHz}, U_{mess} = 50\text{ mV}$
Capacity against enclosure	C	≤ 500	pF	$f = 300\text{ kHz}, U_{mess} = 50\text{ mV}$
Thermal time constant	τ	approx. 400	s	Enclosure AWD300xxx
		approx. 1,000		Cooling phase free in air
Weight	m	300	g	
Energy absorption	Q	4.5	kJ	at 1.2 s (1% duty cycle)
		8.3	kJ	at 7.2 s (6% duty cycle)
Maximum permissible operating voltage	U_B	≤ 700 AC	V	Taking into consideration the „intrinsic safety“ ¹
		≤ 1,000 DC	V	
Isolation voltage	U_{iso}	≥ 2,500 AC	V	$f = 50\text{ Hz}; t = 1\text{ s}$
Max. permissible case temp.	ϑ_C	≤ 180	°C	unobstructed convection
Storage temperature	ϑ_S	-25 ... +85	°C	

Versions

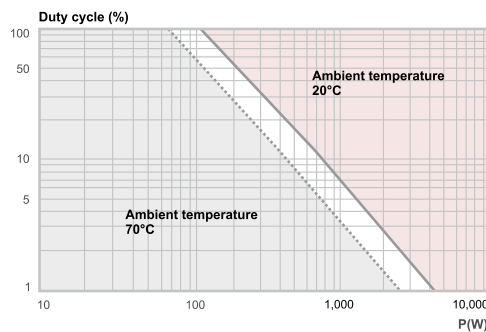


AWS300

Dimensions and mounting holes (mm)

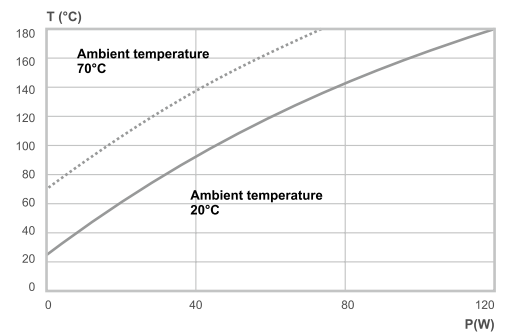


Pulse loading capacity Brake resistor AWx300



Case temperature Brake resistor AWx300

with duty cycle ED = 100%
Maximum permissible temperature T = 180°C



¹ With fourfold type power and free convection. 1. no short-circuit, 2. no fault to frame, 3. self-extinguishing, 4. no melting of casing. Type power always corresponds to 35% duty cycle of the respective resistor type.

What we offer:

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We look forward to hearing from you!



Michael Koch GmbH
Zum Grenzgraben 28, 76698 Ubstadt-Weiher, Tel. +49 7251 96 26-200
www.brakeenergy.com, mail@bremsenergie.de

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